WHAT IS CLAIMED IS:

1. An inventory application method, comprising the steps:

specifying whether a search is for orders or materials;
if the search is for orders,

    i)   inputting materials available and capturing a complete set of attributes for the materials, and

    ii)   looking for feasible matches of the materials against orders;

if the search is for materials,

    i)   specifying orders and capturing attributes for routing steps of the orders, and

    ii)   looking for feasible matches of orders against materials;

compiling a list of feasible matches;

evaluating each match;

ranking the matches; and

using said rankings to assign materials to orders.

2. A method according to Claim 1, further comprising the steps of inputting values for a set of parameters, and wherein:

the step of looking for feasible matches of the materials against orders includes the step of looking for feasible matches of the materials against orders on the basis of said input values; and

the step of looking for feasible matches of the orders against materials includes the step of looking for feasible matches of the orders against materials on the basis of said input values.

3. A method according to Claim 1, wherein the ranking step includes the steps of:

inputting weighted parameters defined by the user; and

ranking the matches according to the weighted parameters.

4. An inventory application system, comprising:

means for specifying whether a search is for orders or materials;

means for looking for feasible matches of materials against orders on the basis of input materials available and a set of attributes for the materials;

means for looking for feasible matches of orders against materials on the basis of specified orders and attributes for routing steps of the orders;

means for compiling a list of feasible matches;

means for evaluating each match;

means for ranking the matches; and

means for using said rankings to assign materials to orders.

5. A system according to Claim 4, wherein:

the means for looking for feasible matches of the materials against orders includes means for looking for feasible matches of the materials against orders on the basis of input values for a set of parameters; and

the means for looking for feasible matches of the orders against materials includes means for looking for feasible matches of the orders against materials on the basis of input values for a set of parameters.

6. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for managing inventory, said method steps comprising:

specifying whether a search is for orders or materials;

if the search is for orders,

    i)   inputting materials available and capturing a complete set of attributes for the materials, and

    ii)   looking for feasible matches of the materials against orders;

if the search is for materials,

    i)   specifying orders and capturing attributes for routing steps of the orders, and

    ii)   looking for feasible matches of orders against materials;

compiling a list of feasible matches;

evaluating each match;

ranking the matches; and

using said rankings to assign materials to orders.

7. A program storage device according to Claim 6, wherein said method steps further comprise the step of inputting values for a set of parameters, and wherein:

the step of looking for feasible matches of the materials against orders includes the step of looking for feasible matches of the materials against orders on the basis of said input values; and

the step of looking for feasible matches of the orders against materials includes the step of looking for feasible matches of the orders against materials on the basis of said input values.

8. A method for allocating materials in a production facility, comprising the steps:

identifying materials and orders in production at a defined time;

identifying materials that are available to be assigned to orders; and

iteratively assigning and unassigning materials to orders until (i) all the orders are fulfilled, or (ii) there are no more options to be tested.

9. A method according to Claim 8, wherein:

the step of identifying materials and orders includes the step of identifying incomplete orders and a due date for each of the incomplete orders;

the step of iteratively assigning and unassigning materials includes the step of, starting with the incomplete order having the earliest due date, searching among the available materials for a material that fulfills said incomplete order.

10. A method according to Claim 9, wherein the step of iteratively assigning and unassigning materials includes the further step of, if no available material fulfills the order, searching among previously assigned material to orders for a material that fulfills the incomplete order.

11. A system for allocating materials in a production facility, comprising:

means for identifying materials and orders in production at a defined time;

means for identifying materials that are available to be assigned to orders; and

means for iteratively assigning and unassigning materials to orders until (i) all the orders are fulfilled, or (ii) there are no more options to be tested.

12. A system according to Claim 11, wherein:

the means for identifying materials and orders includes means for identifying incomplete orders and a due date for each of the incomplete orders; and

the means for iteratively assigning and unassigning materials includes means for searching among the available materials for a material that fulfills the one of the incomplete order having the earliest due date.

13. A system according to Claim 12, wherein the means for iteratively assigning and unassigning materials includes means for searching among materials previously assigned to orders, if no available material fulfills the incomplete order, for a material that fulfills the incomplete order.

14. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for allocating materials in a production facility, said method steps comprising:

identifying materials and orders in production at a defined time;

identifying materials that are available to be assigned to orders; and

iteratively assigning and unassigning materials to orders until (i) all the orders are fulfilled, or (ii) there are no more options to be tested.

15. A program storage device according to Claim 14, wherein:

the step of identifying materials and orders includes the step of identifying incomplete orders and a due date for each of the incomplete orders;

the step of iteratively assigning and unassigning materials includes the step of, starting with the incomplete order having the earliest due date, searching among the available materials for a material that fulfills said incomplete order.

16. A program storage device according to Claim 15, wherein the step of iteratively assigning and unassigning materials includes the further step of, if no available material fulfills the order, searching among previously assigned material to orders for a material that fulfills the incomplete order.